

25. NOTES ON BOMBAY PLANTS

(With five photos in two plates)

1. Observations on the genus *Asparagus* at Khandala and the adjoining Plateau (Maharashtra).

The genus *Asparagus* was known to be represented in the Western Ghats and its adjoining Deccan Plateau, from a group of three species, namely, *Asparagus racemosus* Willd., *A. jacquemontii* Baker, and *A. laevisissimus* Steud. ex. Baker. These are detailed by Cooke in his FLORA OF THE PRESIDENCY OF BOMBAY. Recent publications, however, do not distinguish all the three taxa. Father Santapau, after over two decades of critical work on the plants of Khandala has reduced *A. jacquemontii* Baker to the synonymy of *A. racemosus* Willd. Vartak (1953, 1956-57 & 1971), lists a single species of *A. racemosus* Willd. in these areas.

Further, *A. racemosus* Willd. is known under the name of *shatavari* and though is of wide economic interest for its roots, yet none of the floras give a full description of the roots. Hooker says 'roots tuberous', while Cooke describes 'rootstock tuberous' in respect of *A. racemosus* Willd. Cooke adds: 'The oblong fleshy tubers are often candied for the table'. There is no mention about the roots of the other two species either by Hooker, or by Cooke. Subsequent authors including Father Santapau, too do not make any mention of roots.

In our routine botanical exploration in Wadgaon taluka adjoining the Khandala area, the junior author had a whole plant of asparagus, the roots included, carefully dug and lifted out of ground. This revealed a cluster of long roots all cylindrical and of uniform thickness (see plate 1, photo I, fig. a). We have counted up to 100 roots in a plant which measured 20 to 100 cm in length, 0.9-1.2 cm in thickness. Their tips never taper. The roots are borne on a sympodial rhizome which gives rise generally to a single shoot each season at one end. The shoots are apparently annual or biennial. These plants are further characterised by scandent habit, small cladodes and pedicels which are articulated below the centre (in fruit). This taxon is referable to *A. laevisissimus* Steud. ex Baker.

We have also similarly examined in the field the roots of the Khandala plant. Here too the roots are borne in a bunch but the individual roots are different, being tuberous, spindle-shaped and tapering especially at the apex into a long thread-like beak. They also have a narrowed fibre-like basal stalk (see plate 1, photo I, fig. b). The roots are up to 75 in number, comparatively short and stout, being 13-38 cm long and 0.9 to 1.6 cm (mostly 1.5 cm) thick. These plants are further

characterised by slender climbing habit, large cladodes, and pedicels articulated above the centre (in fruit). This is *A. racemosus* Willd. re-established by Father Santapau in the FLORA OF KHANDALA. The plants in the adjoining Lonavala hills, as well as in Purandhar Fort hill and Mahabaleshwar belong to this taxon.

Our investigations also show that *shatavari* roots are marketed in about 5 cm long cut pieces. Further as stated by Kanitkar *et al.* (1969), commerical drug samples in Maharashtra are cylindrical with even thickness as compared to the north Indian samples which have mostly a tapering end. Apparently enough, the Maharashtra and the north Indian materials are referable to *Asparagus laevis* Baker and *A. racemosus* Willd. respectively, but more data is needed for confirmation of their botanical identity.

2. Abnormal flowering of *Zingiber macrostachyum* Dalz. in Khandala.

There are two species of *Zingiber* in Khandala, both of which are known to produce flowers (in cone-like spikes), directly from the ground. Recently the junior author has come across an abnormality and a plant was noticed to bear flowers at the tip of the leafy shoot. This plant is referable to *Zingiber macrostachyum* Dalz. in all other characteristics.

A specimen was collected for the Herbarium and a photograph of the same is reproduced here along with the normal plant (plate 1, photos II and III).

3. *Premna latifolia* var. *viburnoides* C. B. Clke.—a new record for Western India—(plate 2, photos IV and V).

This is a plant thus far reported only from south India (Kerala and Tamil Nadu). It is not listed in any floras dealing with the plants of Bombay. However, the plant very rarely flowers in Bombay which may be a reason why it escaped the attention of previous botanists. Further, none of the floras give a full description of the plant.

We give below the nomenclature, botanical description based on our collections, etc. of the taxon:

Premna latifolia Roxb. var. *viburnoides* C. B. Clke.

In Hook. *f.* Fl. Brit. Ind. 4:578, 1885; Gamble Fl. Pres. Madras, 767, 1921.

P. viburnoides Wall. Cat. 2646b, 1831, *nomen nudum*.

A large shrub 4-8 m high with corky light-yellow bark; young green branches, and leaves drying olive green. *Leaves* thin, pleasantly



Photo II: *Zingiber macrostachyum* Dalz.—
Terminal part of the flower-bearing
leafy shoot.



Photo III: *Zingiber macrostachyum*
Dalz.—Habit (normal).

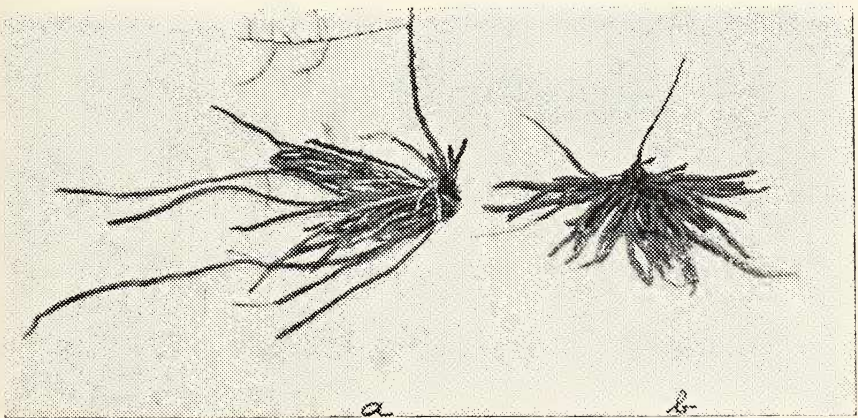
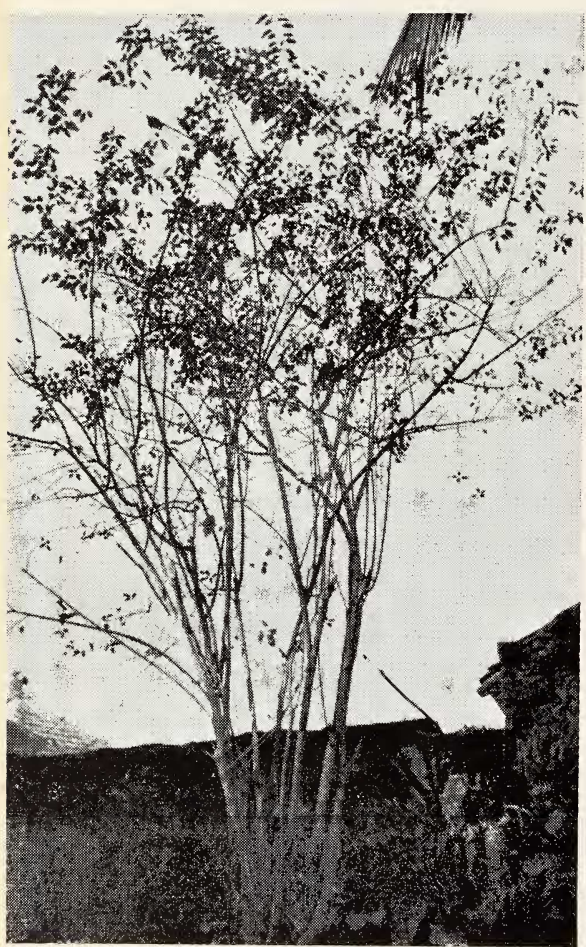


Photo I. fig. a: *Asparagus laevisissimus* Steud. ex Baker—Roots with basal
part of the shoot.
fig. b: *A. racemosus* Willd.—Roots with basal part of the shoot.

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Premna latifolia Roxb. var. *viburnoides* C. B. Clke.

Left. Photo IV: Habit. Right. Photo V: Herbarium sheet showing branches with flowers and with